

Application/Control Number: 09/703,622  
Art Unit: 2654

Docket No.: 2000-0302

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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method of generating a scene description from a set of words, comprising:

performing a linguistic analysis on the set of words to generate a structure representative of [[the]] semantic relations of the set of words;

converting said structure to a set of description elements, wherein the description elements are representative of objects to be depicted in a scene and relationships between objects;

depicting a spatial relation by using at least one spatial tag of an associated one or more of the objects;

assigning a set of depictors to each of the description ~~element~~ elements, wherein each of the depictors ~~comprise~~ comprises:

a reference to an object to be modified,

parameters used in modifying the object, and

a procedure for the modification of the object; and

generating said scene description by execution of said procedures for the modification of the objects.

2. (Original) The method of claim 1, wherein the linguistic analysis includes tagging the set of words with grammatical parts of speech.

3. (Original) The method of claim 1, wherein the linguistic analysis includes parsing the set of words into a parse tree structure representative of the structure of the set of words.

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4. (Original) The method of claim 1, wherein the structure representative of the semantic relations of the set of words is a dependency structure, wherein the dependency structure indicates words that a given word is dependent on and indicates the words that depend on the given word.
5. (Currently Amended) The method of claim 1, wherein each of the description ~~element~~ elements is classified as belonging to a respective description element type.
6. (Currently Amended) The method of claim 5, wherein each of the description element ~~type~~ types has an object to which the respective description element refers.
7. (Currently Amended) The method of claim 1, wherein at least one of the description ~~element~~ elements is ~~is~~ [[are]] modified to resolve conflicts between some of the description elements.
8. (Currently Amended) The method of claim 1, wherein at least one of the description ~~element~~ elements is modified to add constraints to at least some of the description elements.
9. (Currently Amended) The method of claim 1, wherein at least one of the ~~depictor~~ depictors is modified to resolve conflicts between at least some of the depictors.
10. (Currently Amended) The method of claim 1, wherein at least one of the ~~depictor~~ depictors is modified to add constraints to at least some of the depictors.

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11. (Currently Amended) A machine-readable medium having stored thereon a plurality of executable instructions, the plurality of instructions comprising instructions to:
- perform a linguistic analysis on a set of words to generate a structure representative of [[the]] semantic relations of the set of words;
  - convert said structure to a set of description elements, wherein the description elements are representative of objects to be depicted in a scene and relationships between objects;
  - assign a set of depictors to each of the description ~~element~~ elements, wherein each of the depictors ~~comprise~~ comprises:
    - a reference to an object to be modified,
    - parameters used in modifying the object, and
    - a procedure for the modification of the object;
  - identify at least one conflict between at least some of the depictors;
  - modify at least one of the depictors to resolve the at least one conflict; and
  - generate a scene description by execution of said procedures for the modification of the objects.
12. (Original) The machine-readable medium of claim 11, wherein the linguistic analysis includes tagging the set of words with grammatical parts of speech.
13. (Original) The machine-readable medium of claim 11, wherein the linguistic analysis includes parsing the set of words into a parse tree structure representative of the structure of the set of words.
14. (Original) The machine-readable medium of claim 11, wherein the structure representative of the semantic relations of the set of words is a dependency structure, wherein

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the dependency structure indicates words that a given word is dependent on and indicates the words that depend on the given word.

15. (Currently Amended) The machine-readable medium of claim 11, wherein each of the description ~~element~~ elements is classified as belonging to a respective description element type.

16. (Currently Amended) The machine-readable medium of claim 15, wherein each of the description element ~~type~~ types has [[an]] a respective object to which each of the description ~~element~~ elements refers.

17. (Currently Amended) The machine-readable medium of claim 11, wherein at least one of the description ~~element~~ elements is modified to resolve conflicts between at least some of the description elements.

18. (Currently Amended) The machine-readable medium of claim 11, wherein at least one of the description ~~element~~ elements is modified to add constraints to at least some of the description elements.

19. (Canceled),

20. (Currently Amended) The machine-readable medium of claim 11, wherein at least one of the ~~depictors~~ ~~depictor~~ is modified to add constraints to at least some of the depictors.

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21. (Currently Amended) A method of generating a low-level scene description from a set of words, comprising:

tagging the set of words with parts of speech;

parsing said tagged set of words into a parse tree structure representative of [[the]] a structure of the set of words;

converting said parse tree into a structure representative of the semantic relations of the set of words;

converting said structure into a high-level scene description, wherein said high-level scene description includes at least one description element;

assigning a set of depicators to each description element, wherein each of the depicators ~~comprise~~ comprises:

a reference to an object to be modified,

parameters used in modifying the object,

a procedure for the modification of the object;

identifying at least one conflict between at least some of the depicators;

modifying at least one of the depicators to resolve the at least one conflict and

generating said low-level scene description by execution of said procedures for the modification of the objects.

22. (Original) The method of claim 21, wherein the structure representative of the semantic relations of the set of words is a dependency structure, wherein the dependency structure indicates words that a given word is dependent on and indicates the words that depend on the given word.

23. (Currently Amended) The method of claim 21, wherein each of the description element elements is classified as belonging to a description element type.

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24. (Currently Amended) The method of claim 23, wherein each of the description element ~~type types~~ has ~~[[an]]~~ a corresponding object to which ones of the description ~~element~~ elements refers.

25. (Currently Amended) The method of claim 21, wherein at least one of the description ~~element~~ elements is modified to resolve conflicts between at least some of the description elements.

26. (Currently Amended) The method of claim 21, wherein at least one of the description ~~element~~ elements is modified to add constraints to at least some of the description elements.

27. (Canceled)

28. (Currently Amended) The method of claim 21, wherein at least one ~~depictor of the~~ depictors is modified to add constraints to at least some of the depictors.

29. (Currently Amended) A machine-readable medium having stored thereon a plurality of executable instructions, the plurality of instructions comprising instructions to:

tag a set of words with parts of speech;

parse said tagged set of words into a parse tree structure representative of ~~[[the]]~~ a structure of the set of words;

convert said parse tree into a structure representative of ~~[[the]]~~ semantic relations of the set of words;

convert said structure into a high-level scene description, wherein said high-level scene description includes at least one description element;

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assign a set of depictors to each of the at least one description element, wherein the set of the depictors ~~comprise~~ comprises:

- a reference to an object to be modified,
- parameters used in modifying the object,
- a procedure for the modification of the object;

modify at least one of the depictors to resolve at least one conflict between at least some of the depictors; and

generate a scene description by execution of said ~~procedures~~ procedure for the modification of the ~~objects~~ object.

30. (Original) The machine-readable medium of claim 29, wherein the structure representative of the semantic relations of the set of words is a dependency structure, wherein the dependency structure indicates words that a given word is dependent on and indicates the words that depend on the given word.

31. (Currently Amended) The machine-readable medium of claim 29, wherein each of the at least one description element is classified as belonging to a description element type.

32. (Currently Amended) The machine-readable medium of claim 31, wherein the description element type has an object to which the at least one description element refers.

33. (Currently Amended) The machine-readable medium of claim 29, wherein one of the at least one description element is modified to resolve conflicts between at least some of the description elements.

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34. (Currently Amended) The machine-readable medium of claim 29, wherein one of the at least one description element is modified to add constraints to at least some of the description elements.

35. (Canceled).

36. (Currently Amended) The machine-readable medium of claim 29, wherein at least one of the depicitors ~~depictor~~ is modified to add constraints to at least some of the depicitors.

37. (Currently Amended) A method of generating a scene description from a set of words, comprising:

performing a linguistic analysis on the set of words to generate a structure representative of [[the]] semantic relations of the set of words;

converting said structure to a set of description elements, wherein the description elements are representative of objects to be depicted in a scene and relationships between the objects;

depicting a spatial relation by using at least one spatial tag of an associated one or more of the objects;

assigning a set of constraints to each description element in said set of description elements; and

generating said scene description by solving said set of constraints for said set of description elements.

38. (New) The machine-readable medium of claim 11, wherein the plurality of instructions further comprise instructions to:

depict a spatial relation by using at least one spatial tag of an associated one or more



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of the objects.

39. (New) The method of claim 21, further comprising:

depicting a spatial relation by using at least one spatial tag of an associated one or more of the objects.

40. (New) The machine-readable medium of claim 29, further comprising instructions to:

depict a spatial relation by using at least one spatial tag of an associated one or more of the objects.